



2005 Clean Air Innovations Conference Introduction to Pennsylvania Clean Air Innovations

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Technology Development

Topics

- Pennsylvania's Alternative Energy Portfolio Standard
- Other Clean Air Innovations
- Observations/Challenges for the Future

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Alternative Energy Portfolio Standard Overview

- Requires that 18% of retail electricity be generated from alternative resources in 15 years
- Two tiers
 - Renewable Tier 8%
 - Alternative Energy Tier 10%

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AEPS Policy Objectives

- Cleaner air through renewables, demand-side management and relatively cleaner alternative generation
- Economic development
- Promotion of distributed generation

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Unique Elements of AEPS

- Largest solar share in the nation
 - 400 to 800 MW by 2020
- Demand-side management measures are an eligible compliance measure
- Tier II rewards “cleaner” alternative generation
- Statewide interconnection and net-metering

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Benefits of AEPS

- Environmental Benefits
 - Avoids: 6.5 million tons of CO₂ (2% of current PA emissions) in the 15th year and thereafter
 - Avoids: 50,000 tons of SO₂ and 14,000 tons of NO_x (5.3% of 2000 emissions) in the 15th year and thereafter
 - Opportunities for watershed restoration and carbon capture
- Economic Benefits
 - Wind Deployment: 3,000 to 4,000 MW
 - 3,500 more jobs over 20 years compared to BAU
 - \$9 billion more in GSP over 20 years compared to BAU
 - Minimal impact on electricity rates (without solar share net-rate decrease of 1%)

Other PA Clean Energy/Air Initiatives

- \$1 million in annual clean air funds dedicated to clean energy deployment
 - Supporting Bear Creek, a 24 MW, wind farm in northeastern Pennsylvania.
- EE/RE small source set-aside
- Integrated Gasification Combined Cycle (Clean Coal)

Observations Challenges

- EPA regional leadership is key (as is DOE)
- Need to focus on real incentives and opportunities (is that really SIP credit?)
 - Energy Policy Act of 2005
- Multi-media approach can expand opportunities
- Clean Diesel

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Questions, Comments, Criticisms

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